http://www.cas.org/infopolicy.html

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Uploading C:\Program Files\Stnexp\Queries\10511666.str

L1 STRUCTURE UPLOADED

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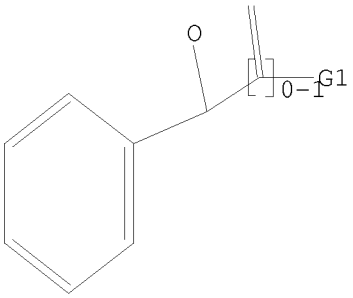
L1 HAS NO ANSWERS
L1 STR



G1 COOH,NH2

Structure attributes must be viewed using STN Express query preparation.

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REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 17:01:28 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8603215 TO ITERATE

10.0% PROCESSED 856551 ITERATIONS 15591 ANSWERS

11.6% PROCESSED 1000000 ITERATIONS 17007 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.19

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 8603215 TO 8603215
PROJECTED ANSWERS: 145168 TO 147460

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=> s l3 and py<2003
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L5           0 L3 AND PY<2003

=> d l3 528 ibib abs hitstr

L3   ANSWER 528 OF 528  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2006:136617  CAPLUS
DOCUMENT NUMBER:         144:266598
TITLE:                   Synthesis, SAR studies, and evaluation of
                         1,4-benzoxazepine derivatives as selective 5-HT1A
                         receptor agonists with neuroprotective effect:
                         Discovery of Piclozotan
AUTHOR(S):               Kamei, Katsuhide; Maeda, Noriko; Nomura, Kayoko;
                         Shibata, Makoto; Katsuragi-Ogino, Ryoko; Koyama,
                         Makoto; Nakajima, Mika; Inoue, Teruyoshi; Ohno,
                         Tomochika; Tatsuoka, Toshio
CORPORATE SOURCE:        Daiichi Asubio Pharma Co., Ltd, Mishima-gun, Osaka,
                         Shimamoto-cho, 618-8513, Japan
SOURCE:                  Bioorganic & Medicinal Chemistry (2006), 14(6),
                         1978-1992
                         CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER:               Elsevier B.V.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
OTHER SOURCE(S):         CASREACT 144:266598
AB   A new series of 1,4-benzoxazepine derivs. was designed, synthesized, and
     evaluated for binding to 5-HT1A receptor and cerebral anti-ischemic
     effect.  A lot of compds. exhibited nanomolar affinity for 5-HT1A receptor
     with good selectivity over both dopamine D2 and α1-adrenergic
     receptors.  Among these compds., 3-chloro-4-[4-[4-(2-pyridinyl)-1,2,3,6-
     tetrahydropyridin-1-yl]butyl]-1, 4-benzoxazepin-5(4H)-one (50: SUN N4057
     (Piclozotan) as 2HCl salt) showed remarkable neuroprotective activity in a
     transient middle cerebral artery occlusion (t-MCAO) model.
IT   948834-79-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (Synthesis, SAR studies, and evaluation of 1,4-benzoxazepine derivs. as
        selective 5-HT1A receptor agonists with neuroprotective effect:
        Discovery of Piclozotan)
RN   948834-79-5  CAPLUS
CN   Benzamide, 2-(1,3-dioxolan-2-ylmethyl)-  (CA INDEX NAME)
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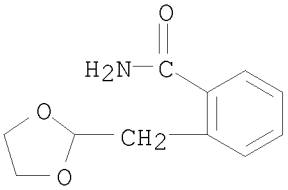

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L6 STRUCTURE UPLOADED

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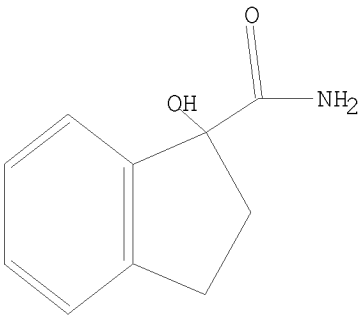
L6 HAS NO ANSWERS
L6 STR



Structure attributes must be viewed using STN Express query preparation.

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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FULL SCREEN SEARCH COMPLETED - 15228 TO ITERATE

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SEARCH TIME: 00.00.01

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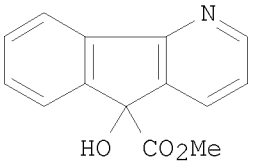
L8 12 L7

=> s l8 and py<2002
21939595 PY<2002
L9 12 L8 AND PY<2002

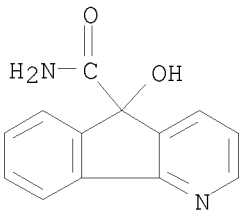
=> d 1-12 ibib abs hitstr

L9 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:658540 CAPLUS
DOCUMENT NUMBER: 123:227966
TITLE: Synthetic routes to indenopyridine analogs of morphactins
AUTHOR(S): Braven, J.; Hanson, R. W.; Smith, N. G.
CORPORATE SOURCE: Faculty of Science, University of Plymouth, Devon, UK
SOURCE: Journal of Heterocyclic Chemistry (1995), 32(3), 1051-5
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



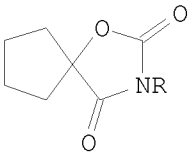
I

AB Investigation of a number of synthetic routes to aza analogs of morphactins led to the synthesis of indenopyridine I and the corresponding carboxamide.
IT 168128-25-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthetic routes to indenopyridine analogs of morphactins)
RN 168128-25-4 CAPLUS
CN 5H-Indeno[1,2-b]pyridine-5-carboxamide, 5-hydroxy- (CA INDEX NAME)

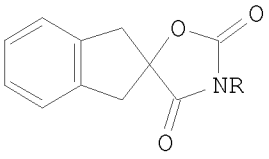


L9 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:438398 CAPLUS
DOCUMENT NUMBER: 99:38398
ORIGINAL REFERENCE NO.: 99:6033a,6036a
TITLE: Synthesis and structural study of cyclopentane, indene and fluorene spiro-derivatives
AUTHOR(S): Galvez, E.; Trigo, G. G.; Martinez, M.; Cabezas, N.
CORPORATE SOURCE: Fac. Farm., Univ. Complutense, Madrid, 3, Spain
SOURCE: Journal of Heterocyclic Chemistry (1983), 20(1), 13-16
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 99:38398
GI



I



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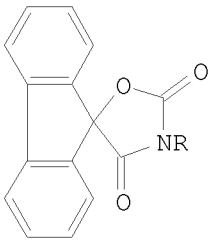
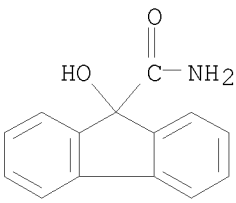


III

AB Title compds. I-III [R = N-(diphenylmethyl)piperazinomethyl, PhCH2N(Ph)CH2] were prepared from cyclopentanone, 2-indanone, and 9-hydroxyfluorene-9-carboxylic acid (IV), resp. E.g., IV was converted to carboxamide which was treated with (EtO)2CO to give III (R = H). Mannich reaction of III (R = H) with PhNHCH2Ph gave III [R = PhCH2N(Ph)CH2].

IT 75072-06-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclocondensation of, with carbonate, oxazolidine from)

RN 75072-06-9 CAPLUS
CN 9H-Fluorene-9-carboxamide, 9-hydroxy- (CA INDEX NAME)



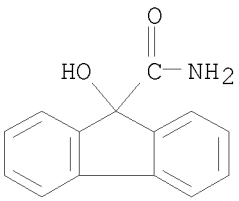
L9 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:567829 CAPLUS
DOCUMENT NUMBER: 93:167829

ORIGINAL REFERENCE NO.: 93:26719a,26722a
TITLE: Synthesis of α-hydroxy amides via the cyanosilylation of aromatic ketones
AUTHOR(S): Grunewald, Gary L.; Brouillette, Wayne J.; Finney, Jay A.
CORPORATE SOURCE: Dep. Med. Chem., Univ. Kansas, Lawrence, KS, 66045, USA
SOURCE: Tetrahedron Letters (1980), 21(13), 1219-20
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 93:167829

AB Hydrolysis of the trimethylsilyl ethers of cyanohydrins of aryl alkyl and diaryl ketones with HCl or HNO3/HCO2H gave the corresponding α-hydroxy amides. E.g., PhCOEt reacted sequentially with Me3SiCN in the presence of ZnI2 and HCl giving 75-90% PhC(OH)EtCONH2. Similar reaction was observed for 9-fluorenone.

IT 75072-06-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by cyanosilylation-hydrolysis of aromatic ketone)

RN 75072-06-9 CAPLUS
CN 9H-Fluorene-9-carboxamide, 9-hydroxy- (CA INDEX NAME)



L9 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:473961 CAPLUS
DOCUMENT NUMBER: 91:73961
ORIGINAL REFERENCE NO.: 91:11945a,11948a
TITLE: Base-catalyzed carbon-to-oxygen acyl rearrangement via an aromatic transition state
AUTHOR(S): Miller, Arnold R.
CORPORATE SOURCE: Sch. Chem. Sci., Univ. Illinois, Urbana, IL, USA
SOURCE: Journal of Organic Chemistry (1979), 44(12), 1931-3
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English

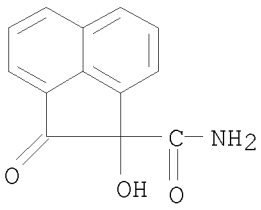
AB Homologs of 2-hydroxyacenaphthenone (e.g., acenaphthenequinone cyanohydrin) undergo facile base-catalyzed C-to-O acyl rearrangement to peri ring-expanded naphthalides. The rearrangement is catalyzed by nonnucleophilic bases (e.g., 1,5-diazabicyclo[5.4.0]undec-5-ene), and the naphthalide product can be crystallized directly from the reaction mixture under hydroxide catalysis. Consequently, the reaction does not proceed via nucleophile-induced peri-ring cleavage to an intermediate hydroxynaphthoic acid followed by lactonization. An alternative mechanism is proposed that

involves base-catalyzed formation of an intermediate α-oxanol followed by bridgehead C-C bond cleavage to an aromatic carbanion isoelectronic with the 14 π-electron phenalenyl carbanion.

IT 69517-49-3
RL: PRP (Properties)
(acyl rearrangement of, aromatic transition-state structure for)

RN 69517-49-3 CAPLUS

CN 1-Acenaphthylenecarboxamide, 1,2-dihydro-1-hydroxy-2-oxo- (CA INDEX NAME)



L9 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:27078 CAPLUS

DOCUMENT NUMBER: 58:27078

ORIGINAL REFERENCE NO.: 58:4486a-b

TITLE: Conversion of namakochrome into Spinochrome E

AUTHOR(S): Yamaguchi, Masaru; Mukai, Toshihiko; Tsumaki, Tokuichi

SOURCE: Memoirs of the Faculty of Science, Kyushu University, Series C: Chemistry (1961), C 4(No. 3), 193-5
CODEN: MFKCAL; ISSN: 0085-2635

DOCUMENT TYPE: Journal

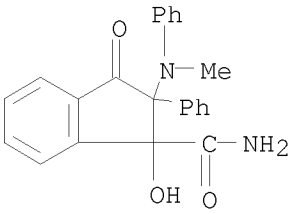
LANGUAGE: Unavailable

AB The relationship of namakochrome, 2-methoxy-3,5,6,7,8-pentahydroxynaphthoquinone (I), to Spinochrome E, hexahydroxy-1,4-naphthoquinone (II), was shown by conversion of I into II with HBr and conversion of II into I with CH2N2. I (35 mg.) boiled gently with 20 cc. HBr solution (sp. gr. 1.48) 5 min., the red solution cooled, diluted with H2O, the precipitate filtered off, recrystd. from HOAc or MeOH, and dried in vacuo at 100° gave 25 mg. II, m. above 300°. The tetramethyl derivative of II prepared with CH2N2, m. 185-7°, was shown to be identical with the trimethyl derivative of I by mixed m.p. II in MeOH treated with Et2O solution of CH2N2, dried in vacuo, and paper chromatographed (developer, 98% HCO2H) gave the following Rf values: 0.86, tetramethyl derivative of II; 0.74, 0.61, I; 0.43, II. Hexaacetyl derivative of II m. 189°.

IT 96262-49-6
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 96262-49-6 CAPLUS

CN 1-Indancarboxamide, 1-hydroxy-2-(N-methylanilino)-3-oxo-2-phenyl- (7CI) (CA INDEX NAME)

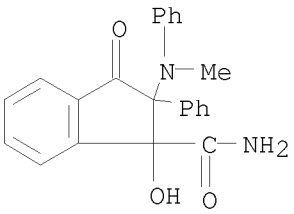


L9 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1963:27077 CAPLUS
DOCUMENT NUMBER: 58:27077
ORIGINAL REFERENCE NO.: 58:4485e-h,4486a
TITLE: Oxidative and oxidative-hydrolytic transformations of organic molecules. XXXV. Synthesis and properties of polyfunctional substituted indans
AUTHOR(S): Shchukina, L. A.; Semkin, E. P.
SOURCE: Zhurnal Obshchei Khimii (1962), 32, 483-93
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

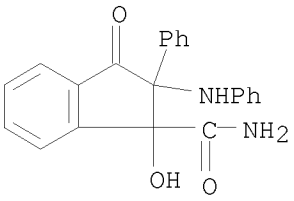
AB Oxidative hydrolysis of hydroxynaphthoquinones and polycarbonyl cyclic compds. may be used to form polyfunctional indans. Keeping 2-substituted-2-chloro(or bromo)-3,3-dihydroxydihydro-1,4-naphthoquinones in dilute aqueous or aqueous MeOH solution of NaOH 5-10 min. at -2° (or 20° for the last 3 substances) gave after acidification I (R, R', and m.p. given): Me, OH (Ia), 124-6°; Ph, OH, 124-6°; o-MeC6H4, HO (Ib), 170-1°; Ph, MeO, 97-9°; o-MeC6H4, MeO (Ic), 133°. The last 3 compds. were also prepared similarly from 2-substituted 2-halodihydro-1,3,4-trioxonaphthalenes or o-R'OCOCC6H4COCHRX (II). Ia was also prepared from 2-methyl-1-indenone-3-carboxylic acid and H2O2. Ic was prepared by esterification of Ib. II (R = Me, R' = NH2, X = Cl) in 30% NH4OH 15 min. at 40° gave I (R = Me, R' = NH2), m. 189-90°. Similarly were prepared I (R = Ph, R' = NH2), m. 213°, and I (R = o-MeC6H4, R' = NH2), m. 187°. I had the oxidizing capacity of 0.94-0.99 moles per mole when allowed to react with KI. I (R = Me, R' = OH) and alc. HCl 8hrs. at reflux gave III (R' = OH, X = Cl), m. 180-1° (decomposition); similarly I (R = Me, R' = OH) with HBr in Et2O in the presence of H2SO4 gave the Br analog, m. 182° (decomposition), while heating III (R' = OH, X = Cl) with MeOH in the presence of H2SO4 gave III (R' = X = OMe), m. 104-6°. I (R = Ph, R' = OH) similarly gave o-(α-chloro-α-phenylacetyl)phenylglyoxylic acid, m. 142° IV (R' = OH, X = Br) (V), m. 164°; and IV (R' = X = OMe), m. 169-70°, resp. V and aqueous alc. HIO4 gave 2-bromo-2-phenyl-1,3-indandione, while V and 2% aqueous NaOH at 0° in 5 min. gave 2-phenyl-1,3-indandione. o-Phenylacetylphenylglyoxylic acid and Br in Et2O under illumination gave V. PhNH2 and I (R = Ph, R' = OMe) in 8 hrs. at 100° gave 2-phenyl-1,3-indandione anil, m. 212°. Similarly I (R = Ph, R' = NH2) gave IV (R' = NH2, X = PhNH), m. 198-200° (decomposition), while a similar reaction with PhNHMe gave IV (R' = NH2, X = PhNMe), m. 171-3° (decomposition), which does not react with HIO4.

IT 96262-49-6P, 1-Indancarboxamide, 1-hydroxy-2-(N-methylanilino)-3-

oxo-2-phenyl- 96266-24-9P, 1-Indancarboxamide, 2-anilino-1-hydroxy-3-oxo-2-phenyl-
RL: PREP (Preparation)
(preparation of)
RN 96262-49-6 CAPLUS
CN 1-Indancarboxamide, 1-hydroxy-2-(N-methylanilino)-3-oxo-2-phenyl- (7CI) (CA INDEX NAME)



RN 96266-24-9 CAPLUS
CN 1-Indancarboxamide, 2-anilino-1-hydroxy-3-oxo-2-phenyl- (7CI) (CA INDEX NAME)



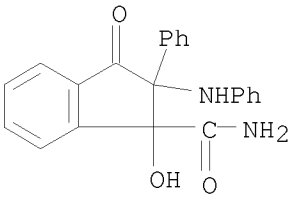
L9 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1963:27076 CAPLUS
DOCUMENT NUMBER: 58:27076
ORIGINAL REFERENCE NO.: 58:4484g-h,4485a-e
TITLE: Oxidative and oxidative-hydrolytic transformations of organic molecules. XXXIV. Synthesis, properties, and hydrolytic conversions of halo and hydroxy triketones of the tetrahydronaphthalene series
AUTHOR(S): Shchukina, L. A.; Semkin, E. P.
SOURCE: Zhurnal Obshchei Khimii (1962), 32, 473-83
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. Chemical Ber. 94, 1697(1961); CA 53, 21783c. Passage of Cl into H2O-CHCl3 suspension of 2-hydroxy-3-methyl-1,4-naphthoquinone gave after treating with activated C and allowing the filtered solution to stand overnight Ia (R2 = R3 = OH, R1 = Cl, R = Me). Similarly was prepared Ia (R2 = R3 = OH, R1 = Cl, R = Ph) (I), m. 86-8°, while Ia (R2 = H, R3 = OH, R1 = H, R = o-tolyl) treated similarly gave Ia [R = o-tolyl, R1 = Cl, (R2R3 =) O], m. 170-2°, formed by dehydration of the diol intermediate. I heated in vacuo to 130°

gave Ia [R = Ph, R1 = Cl, (R2R3 =) O] (II), m. 153°. Similar reaction with Br converted the hydroxynaphthoquinones into 76% Ia (R = Me, R1 = Br, R2 = R3 = OH) (III), m. 99-101°; 2-phenyl analog of Ia (R = Ph, R1 = Br, R2 = R3 = OH) (IV) m. 110-2°; and Ia [R = o-tolyl, R1 = Br, R2R3 =) O] (V) m. 155-6°. These have the oxidizing capacity of 0.94-0.98 mole per mole on treatment with KI in AcOH at 100°. II or its diol analog reacted with o-C6H4(NH2)2 to give 62% VI, m. 174-5°. II and AgOAc at 200° gave 2-phenyl-2-acetoxy-1,3,4-trihydroxytetrahydronaphthalene, m. 143-4°, which with o-phenylenediamine gave the quinoxaline derivative, C24H16O3N2, m. 209°. II or its diol analog boiled 3 min. in H2O gave o-HO2COCC6H4COCHPhCl (VII) monohydrate, m. 144°, which was converted to the anhydrous form in vacuo at 130°, m. 183-4°; Me ester m. 166°. The acid existed in tautomeric equilibrium with a cyclic form. IV and aqueous NH4OH-Me2CO in 5 min. gave o-HO2COCC6H4COCHPhBr monohydrate, m. 139-40°; anhydrous m. 147-9°. This was initially contaminated with some Ia (R = H, R1 = Ph, R2 = H, R3 = OH). Refluxing V with aqueous dioxane 10 min. gave 53% o-HO2COCC6H4COCHClC6H4Me-o (VIII), m. 189°; similarly was prepared 55% the bromo analog, m. 164°. Heating the acid prepared from Ia (R2 = R3 = OH, R1 = Cl, R = Me) with MeOH in the presence of H2SO4 gave 77% o-MeO2COCC6H4COCHClMe, m. 100-1°. VII formed a 1:1 salt with o-C6H4(NH2)2, m. 155°. VII refluxed in H2O in a stream of CO2-free air 3 hrs. gave 89% CO2 and 68% IX (R = Ph, R1 = H), m. 146°; reaction run under N atmospheric gave 87% CO2 and 62% IX (R = Ph, R1 = H). VIII similarly gave 71% IX (R = o-tolyl, R1 = H), m. 170°. o-HO2COCC6H4COCHMeCl and CrO3 in H2O gave IX (R = Cl, R1 = Me), m. 81-3°. VII was oxidized with CrO3 in aqueous AcOHH2SO4 to 66% IX (R = Cl, R1 = Ph), m. 116°, while oxidation with HIO4 gave a 62% yield. HIO4 oxidation of the Br analog gave 47% IX (R = Br, R1 = Ph), m. 105-6°. III and NH3 in Me2CO stirred 5 min. then treated with aqueous H2SO4 gave 90% Ia (R = Me, R1 = OH, (R2R3 =) O] (X), m. 117-19° (decomposition), which readily reacted with aqueous KI to give 89% iodine and 2-methyl-3-hydroxy-1,4-naphthoquinone, while with o-C6H4(NH2)2 X gave the previously reported quinoxaline derivative, m. 187-9° (cf. CA 43, 7009g). X boiled with H2O 15 min. gave 77% o-HO2COCC6H4COCH(OH)Me, m. 231°; X and aqueous alc. NaOH kept 3 min., then acidified, evaporated and extracted with Et2O, gave 67% same acid. X is the first example of a cyclic hydroxypolycarbonyl substance. It is believed that the oxidizing ability of X was connected with intermediate formation of an epoxy ring between 2- and 3-positions from the elements of the HO and the carbonyl groups, which, if true, is a novel reaction type. The hydrolytic conversions of X are believed to proceed through a hydrated intermediate of possibly a triol type.

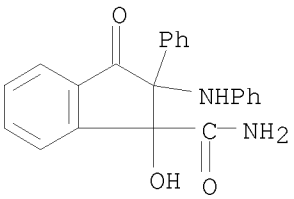
IT 96266-24-9
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 96266-24-9 CAPLUS

CN 1-Indancarboxamide, 2-anilino-1-hydroxy-3-oxo-2-phenyl- (7CI) (CA INDEX NAME)



L9 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1963:27075 CAPLUS
DOCUMENT NUMBER: 58:27075
ORIGINAL REFERENCE NO.: 58:4484f-g
TITLE: 1,2-Dihydronaphthalene from 1,2,3,4-tetrahydro-1-naphthyl hydroperoxide
AUTHOR(S): Naumova, S. F.; Kovaleva, V. N.; Zhavnerko, K. A.
SOURCE: Doklady Akademii Nauk BSSR (1961), 5(No. 3), 109-11
CODEN: DBLRAC; ISSN: 0002-354X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Through 408.1 g. Tetralin (I) and 0.4 g. of Mn resinate at 65-70° was passed O (5 l./hr., dried over ascarite, H_2SO_4, and $CaCl_2$), and resinate (0.15, 0.15, 0.12 g.) added at 6, 18, and 18 hrs., resp.; after 38-40 hrs. the mixture weighed 445 g. (d20 1.0382, n20D 1.5505) and was 34-5% Tetralin hydroperoxide by iodometry. The mixture was reduced by addition to 230 g. $Na_2S.9H_2O$ in 750 ml. of water cooled to 0°, the temperature kept at 7-8° 6-7 hrs., and the organic product extracted with Et_2O to yield 230.9 g. unreacted I, b3 58-62°, and 132.92 g. (96.7%) 1,2,3,4-tetrahydro-1-naphthol (II), b3 106-10°, d20 1.0924, n20D 1.5669. $MgSO_4$ (67.2 g., calcined below 200°) and 56.03 g. II was heated at 130-40° and the product, b11 74-84°, redistd. to give 37.52 g. (76.3%) 1,2-dihydronaphthalene, b3 58.5-60°, n20D 1.5829, d20 0.9970.
IT 96266-24-9
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 96266-24-9 CAPLUS
CN 1-Indancarboxamide, 2-anilino-1-hydroxy-3-oxo-2-phenyl- (7CI) (CA INDEX NAME)



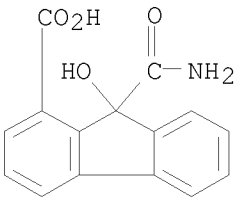
L9 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1961:76031 CAPLUS
DOCUMENT NUMBER: 55:76031
ORIGINAL REFERENCE NO.: 55:14399a-d

TITLE: Fluorene-1,9-dicarboxylic acid. A contribution to the theory of the cyanohydrin synthesis
AUTHOR(S): Kuhn, Richard; Breyer, Ursula
CORPORATE SOURCE: Max-Planck-Inst. Med. Forschung, Heidelberg, Germany
SOURCE: Chemische Berichte (1961), 94, 742-4
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 55:76031

AB Fluorenone-1-carboxylic acid (I) adds readily HCN to yield the cyanohydrin (II), in contrast to fluorenone. The acid hydrolysis of II yielded the 9-OH derivative (III) of fluorene-1,9-dicarboxylic acid (IV) which was reduced with iodine and red P in AcOH to IV in 78% yield. I (15 g.) in 100 cc. C_5H_5N treated with 20 cc. anhydrous HCN, the mixture kept at 50° in vacuo, refluxed 15 hrs. with 100 cc. AcOH, 40 cc. H_2O, and 60 cc. concentrated HCl, and evaporated in vacuo, the residue treated with 750 cc. hot H_2O, and the yellow solution decanted, cooled to 40° to deposit some I and then to 0° gave 9.8 g. III.H_2O, m. 182-9° (H_2O). III.H_2O oxidized with CrO_3 in AcOH gave I, m. 191-3°. III.H_2O (500 mg.) in 10 cc. absolute MeOH treated 10 min. with dry HCl, kept 2 days, and worked up gave 420 mg. di-Me ester of III, needles, m. 170-2° (C_6H_6-petr. ether). II heated 3 hrs. with AcOH-HCl on the steam bath gave 70% monoamide of III.H_2O, m. 215°. III.H_2O (5 g.) in 50 cc. AcOH refluxed 4 hrs. with 300 mg. iodine and 1 g. red P and filtered hot into 500 mg. $NaHSO_3$ in 200 cc. H_2O gave 3.5 g. IV, m. 244-7° (with sintering from 225°) (AcOH); it sublimed without decomposition at 200°/0.0004 mm.; di-Me ester of IV m. 118-18.5° (MeOH or cyclohexane). IV recrystd. from C_6H_6 gave leaflets of IV.0.5C_6H_6, and from $CHCl_3$ containing a little MeOH plates of IV.$CHCl_3$.

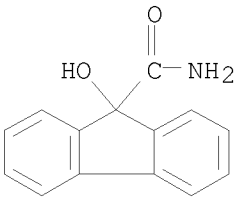
IT 107918-08-1P, Fluorene-1-carboxylic acid, 9-carbamoyl-9-hydroxy-
RL: PREP (Preparation)
(preparation of)

RN 107918-08-1 CAPLUS
CN Fluorene-1-carboxylic acid, 9-carbamoyl-9-hydroxy- (6CI) (CA INDEX NAME)

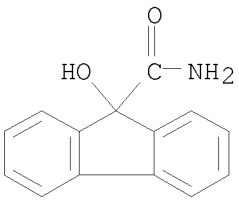


L9 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:45371 CAPLUS
DOCUMENT NUMBER: 52:45371
ORIGINAL REFERENCE NO.: 52:8111c-e
TITLE: Reactions of magnesylamines. II. Synthesis and properties of arylamides of 9-hydroxyfluorene-9-carboxylic acid
AUTHOR(S): Petyunin, P. A.; Berdinskii, I. S.
CORPORATE SOURCE: Pharm. Inst., Perm
SOURCE: Zhurnal Obshchei Khimii (1957), 27,

2999-3001
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 52:45371
AB cf. C.A. 49, 4551h. Heating 9-hydroxyfluorene-9-carboxylic acid with MeOH in presence of H_2SO_4 3 hrs. gave 81.1% Me ester, m. 158-9°, which (1.4 g.) added to PhN(MgBr)2 from 0.82 g. $PhNH_2$ and EtMgBr and refluxed 0.5 hr. gave 83.3% 9-hydroxyfluorene-9-carboxanilide, m. 201-2°. Similar use of p-toluidine gave the p-toluidide, 95.1%, m. 207-8.5°; similarly were prepared: 78% p-anisidide, m. 208-9.5°; 85.2 p-chloroanilide, m. 224-6°; 83.1% p-bromoanilide, m. 220-2°; 77.8% 2-naphthalide, m. 220-1°.
IT 75072-06-9, Fluorene-9-carboxamide, 9-hydroxy-
(N-aryl derivs.)
RN 75072-06-9 CAPLUS
CN 9H-Fluorene-9-carboxamide, 9-hydroxy- (CA INDEX NAME)



L9 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:45370 CAPLUS
DOCUMENT NUMBER: 52:45370
ORIGINAL REFERENCE NO.: 52:8111c
TITLE: Polymerization of styrene under the influence of diazoamino compounds and activators
AUTHOR(S): Vinogradov, P. A.
SOURCE: Zhurnal Obshchei Khimii (1956), 26, 3205-13
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB See C.A. 51, 8040g.
IT 75072-06-9, Fluorene-9-carboxamide, 9-hydroxy-
(N-aryl derivs.)
RN 75072-06-9 CAPLUS
CN 9H-Fluorene-9-carboxamide, 9-hydroxy- (CA INDEX NAME)



L9 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:45369 CAPLUS
DOCUMENT NUMBER: 52:45369
ORIGINAL REFERENCE NO.: 52:8111b-c
TITLE: Synthesis of steroid compounds and substances related to them. XXXVIII. Analogs of doisynolic acid not containing ring B
AUTHOR(S): Nazarov, I. N.; Zav'yalov, S. I.
SOURCE: Bulletin of the Academy of Sciences of the USSR, Division of Chemical Science (English Translation) (1956) 1493-7
CODEN: BACCAT; ISSN: 0568-5230
DOCUMENT TYPE: Journal
LANGUAGE: English
AB See C.A. 51, 8663e.
IT 75072-06-9, Fluorene-9-carboxamide, 9-hydroxy-
(N-aryl derivs.)
RN 75072-06-9 CAPLUS
CN 9H-Fluorene-9-carboxamide, 9-hydroxy- (CA INDEX NAME)